Combined

Enhanced Graphics Software

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Multiple printer screen dump
See reverse of package for hardware requirements

COMPUTER STATION™

Software

COMBINED
ENHANCED GRAPHICS SOFTWARE
(c) 1979-1981 Computer Stations, Inc.
Requires 48K Apple II, DOS 3.3, Applesoft
And any one of the printers and interface cards below:

PRINTERS	INTERFACE CARDS
IDS 440G/445G	Apple parallel
IDS 460G/560G	Apple Centronics
Anadex 9501/9500	Apple Serial
Data South DS 180	Apple Communications
Centronics 739	CCS 7720A
Epson MX-80/MX-100	CCS 7720B
NEC Spinwriter 5510/5520	CCS 7728
NEC Spinwriter 5530	CCS 7710 (asynchronous)
Malibu 200	MCP - CPS (parallel only)
Diablo 1640	
Qume Sprint 5	
NEC Spinwriter 5515/5525	
NEC PC 8023	

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COMPUTER STATION™

Software

Combined Enhanced Graphics Software

Software by David K. Hudson

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Packaging designed for easy inclusion in mini-book (specially designed minature notebook for diskette storage of up to 22 diskettes). Mini-book is Computer Station's stock #7605.

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COMBINED ENHANCED GRAPHICS SOFTWARE
SERIAL #8501-11468

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Glitch of interface cards in general

Most cards send out a random character when first accessed after the machine is powered on. Occassionally, this will cause the first picture printed to have the first line of the picture messed up. This only occurs if the interface card has not been accessed previously. Cure; Print the picture again or print a line of text prior to the graphics dump.

The Apple

Seldom has a problem been traced to the Apple itself. There have been some very rare occassions in which some slots in some Apples did not work properly with some of the supported interface cards. The fix for this rare problem was simply to change slots or interface cards (the same exact type of card but a physically different one).

The Cable

The cable which connects the interface card to the printer is usually not a problem. If the printer works with the Apple in text mode with the cable, it will not likely cause a problem with graphic dumps.

Diagnostics were built in

Many users have asked us why the funny vertical lines went across the screen of the Apple as the picture is printing. There is absolutely no need for doing this except to help diagnose a problem when someone called us for support.

If the short vertical line dances to the end of the screen, the software is sending the picture to the printer. If the printer isn't busy printing then it's not receiving the picture being sent or it can't process the picture it's receiving.

If the lines never start dancing, then the system may well be "hung". This could happen if the wrong slot number was used when the information on the beginning menus was requested.

If the lines go half way down the screen and stop it could well mean that you are using an interface card that is not on the menu or selected a card from the menu different from the one you're using.

If the lines and therefore the dump take longer to reach the bottom than you expected, chances are excellent you are using your printer in serial mode and even at 1200 baud, a serially run dump will take much much longer to finish than a dump using parallel.

Line Feeds

Unwanted line feeds show up as horizontal spaces in regular increments. We include line feed instructions in Enhanced Graphics Software which may give you more that you need. Most all printer have a switch on them to have the printer do a line feed or to turn off the line feed and let the software do it for you. In order to avoid the potential problem of having the graphic overprint on itself, we included line feeds in the software and the default. For those of you who do not wish to turn off the line feed switch on your printer to use our graphics dump, we provide the following procedure to customize your software to eliminate the extra line feed.

BLOAD the object code for you printer (e.g.MX-80.OBJ)
CALL -151
1DED:00
3D0G
BSAVE the object code you just modified

If the above is more programming than you ever care to do, see your dealer for support.

PARTICULARS ON PRINTERS (General and Specific)

SERIAL PRINTERS - A general note for those using serial printers. The serial interface card has a set of dip switches on it which control the video on/off and default line width. The video-on MUST be DISABLED to do graphics. On a wide carriage printer the default column width is usually set to 132 columns (On an Apple serial card, both switches 5 & 6 would be in the off position).

LETTER QUALITY PRINTERS (e.g. Spinwriters, Qumes, Diablos) - The expanded size print is approximately 11 1/2 X 8 and requires using wide paper.

IDS440G-445G - The 445G replaced the 440G. Both use the object code called TIGER.OBJ The 440G printer was named the Paper Tiger by IDS and was the first printer supported by Enhanced Graphics Software. The "G" stands for graphics though the front of the printer case does not show a "G". You can look on the plate on the back where the serial number is to know if you have the "G" model. The Paper Tiger printers have dip switches which have to be set to enable the printer to receive control characters and thus perform graphic dumps. This printer also has a switch which enables it to be used serially or in parallel.

IDS 460G/560G - The 560G is the same as a 460G, but has a side carriage. Both of these printers use the object code TIGER460.OBJ The "G" means graphics and shows on the plate with the serial number. The Paper Tiger 460G series from IDS also has dip switches but they differ from the settings used with the 440G series.

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